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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/679,697	10/05/2000	Robert A. Hansen	3257-39	8915

7590 12/04/2002
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EXAMINER

HASTINGS, KAREN M

ART UNIT	PAPER NUMBER
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1731

13

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

679697

Applicant(s)

Hansen

Examiner

HASTINGS

Group Art Unit

1731

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 10-15-02
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1, 7-32 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☐ Claim(s) 1, 7-32 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).
- *Certified copies not received: _____.

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

Claims 1 and 7-32 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The amendment made to each of independent claims 1 and 22 setting forth that the surface of the top layer and the bottom layer are "substantially smooth" are indefinite. It is clear that the applicant regards this recitation as defining the claimed scope to a degree which distinguishes over the prior art. However, the degree to which this recitation affects the claimed scope is unclear because of the term "substantially".

The term "substantially" is a word of degree and when such a word is used in a claim, the specification must be consulted to determine whether it provides some standard for measuring the aforementioned degree whereby an artisan with ordinary skill would understand what has been claimed. See Seattle Box Co. v. Industrial Crating and Packaging, Inc. 221 USPQ 568, 573-74, 576 (Fed. Cir. 1984). There appears to be nothing specific in the subject specification which provides some standard for measuring the degree to be associated with the term "substantially" contained in the phrase "substantially smooth" in each of independent claims 1 and 22. Indeed, note the specification nowhere explicitly describes the clause set forth at the end of amended claims 1 and 22.

Consideration of the scope of what "substantially smooth" means is particularly relevant to this case because the applicant urges that the here claimed invention, because the surfaces are ~~substantially smooth~~, defines over the prior art of record. It is critical therefore to understand the degree to which the claimed scope is broadened by the term "substantially" as a modifier of the claimed phrase "smooth". Stated otherwise, it is clear that the claimed phrase "substantially smooth" encompasses a completely smooth surface, but it is not clear how much unsmoothness would be permitted and thus encompassed by this claimed phrase.

Again note the specification provides no explicit antecedent basis for the language now used in the claim. Any of the new language that is retained in, or any new language that is added to, the claims should either find explicit antecedent basis in the specification or, so long as no new matter is added, the specification should be amended to provide explicit antecedent basis for any new language added to the claims.

Claims 1 and 7-32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over EP '280 as necessary with Rexfelt and/or Best.

These claims are rejected for substantially the same reasons set forth on pages 3-6 of the last Office action. However the Examiner is now relying on the 103 rejection set forth in the

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last Office action, wherein, even if one construes the claims to exclude interlocking jointing structures, (assuming one agrees with the position argued by applicant, that mechanical interlocking surfaces would not be ~~substantially smooth~~ surfaces) it still would have been prima facie obvious to one of ordinary skill in the art to use the admittedly more traditional interlocking steps of sewing, needling or gluing the offset portions together if one wanted to forgo the stated advantages of EP '280's "interlock". Note EP '280 clearly teaches that adhesive or chemical reactive systems may be used to help join the offset portions, and that the plies may be sewed together.

Furthermore, when one views for example Figures 16, 17 and 21 of EP '280, one can see that the sandwich structure of two plies offset from the mechanical interlocking structures does appear to have "substantially smooth" top and bottom facing surfaces. How much interlocking is permitted by the phrase "substantially smooth" or not is unclear in light of the specification being silent on this issue. Thus a broad interpretation of what is meant by "substantially smooth" could even encompass the structures set forth for example in Figures 16, 17 and 21 of EP '280 since it appears that at least half, or even a majority, of the sandwich structure would be substantially smooth; only the offset portions would have the interlocking structure thereon.

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Furthermore, in any event, the Examiner's position remains that to have eliminated the interlocking structure and its known advantages and to rely on the more traditional way to build up the fabric, i.e. adhesively bonding, sewing, fusing, etc. the offset portions together would have been prima facie obvious to one of ordinary skill in the art. Note that although teachings relied upon may be disclosed in the art as non-preferred, or even unsatisfactory for the intended purpose, they may still be relied upon to set out a case of obviousness. See In re Boe 148 USPQ 507. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including non-preferred embodiments. See Merck & Co. v. Biocraft Laboratories 10 USPQ 2d 1843, 1847 (Fed. Cir. 1989). Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or non-preferred embodiments. See In re Susi, 169 USPQ 423, 426n.3 (CCPA 1971).

Therefore, the Examiner concludes that the references would have suggested to one of ordinary skill in the art the known traditional methods of joining for the overlying unlaminated portions of the bottom layer to the top layer, such as the known prior art methods of sewing, stitching, needling, fusing, gluing etc., for the purpose of joining the layers together, even though such methods for joining are taught to be non-preferred over a mechanical interlocking.

Applicant's arguments filed October 15, 2002 have been fully considered but they are not deemed to be persuasive.

These arguments are addressed in the rejection above.

The main argument is that Baker (EP '280) teaches away from applicant's invention since he teaches interlocking structures for joining the offset portions together. However for the reasons set forth above, the Examiner's position remains that the claimed subject matter would have been prima facie obvious to one of ordinary skill in the art, since one may rely upon non-preferred embodiments in an obviousness rejection. Baker clearly teaches that mechanical interlocking is desirable and preferred; however, as even applicant notes, Baker teaches drawbacks associated with joining of prior art smooth surface segments and thus does indeed teach that the joining may be accomplished by such non-preferred means as gluing or sewing explicitly. See Baker column 2 lines 14-45.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION

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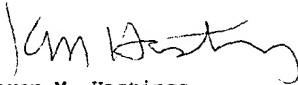
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IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Hastings whose telephone number is (703) 308-0470. The examiner can normally be reached on Monday through Thursday from 6:30 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Steve Griffin, can be reached on (703) 308-1164. The fax phone number for this Group is (703) 305-7115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0651.


Karen M. Hastings
Senior Primary Examiner
Art Unit 1731

KMH/cdc
December 2, 2002

12/2002